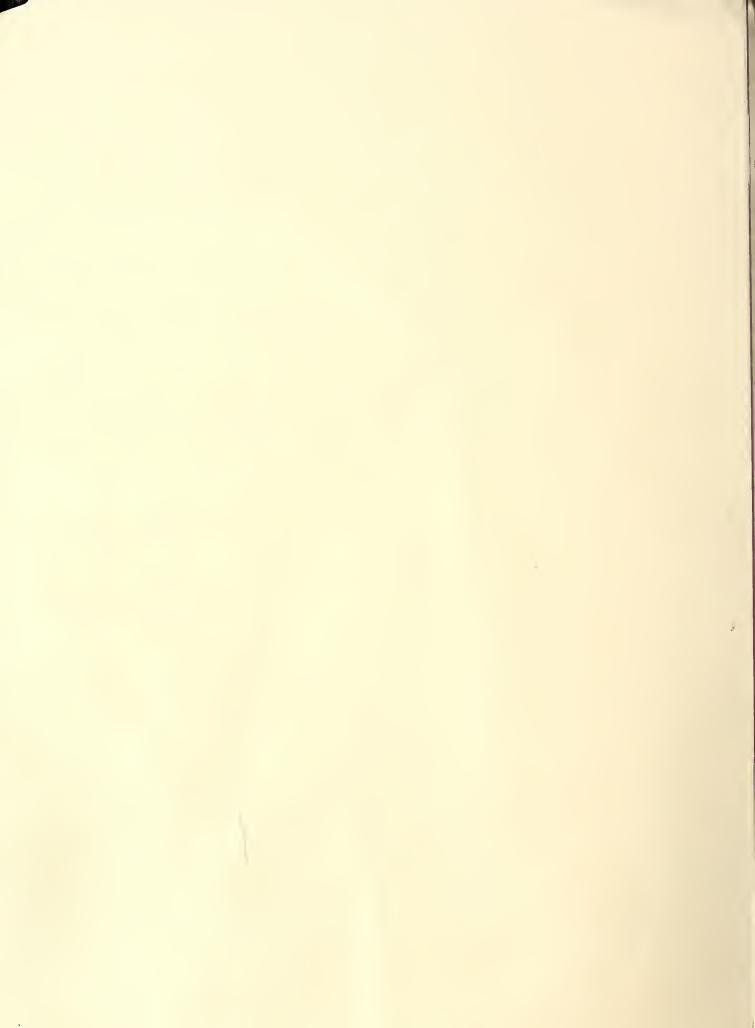
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



United States Department of Agriculture

Foreign Agricultural Service
April 1985

A281.9 F76F0

The

Changing

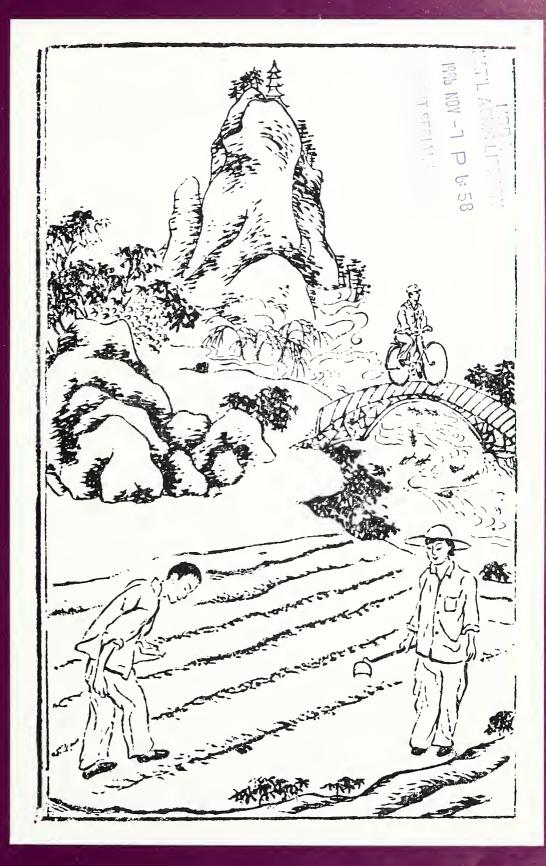
Face

Of

Chinese

Agriculture

Foreign Agricul 5



New Taiwanese Baking School Puts Icing on the Cake

In Taiwan, the China Wheat Products Research and Development Institute recently opened a new baking school, and school officials chose a cake decoration course as the first to be taught. The 10-day course includes 60 hours of hands-on training covering wedding cakes to petit fours.

The school, which has graduated over 3,600 students since it opened in 1967, is supported in part by **U.S.** Wheat Associates. According to U.S. Wheat chairman Jim Jenks, courses taught at the school help increase the diversity of wheat-based products available to Asian customers. In 1984, Taiwan is expected to purchase over \$100 million worth of U.S. wheat, making it one of the largest markets in Asia.

Jenks said that one key to the school's success is that the institute has adequate staff and equipment to give students individual attention and training. "Classroom lectures can help set the stage for learning," Jenks said, "but the student doesn't really begin to learn until he or she actually begins mixing and baking." Over 600 students will sign up to take one of 26 baking courses offered at the school in fiscal 1985.

Korean Forest Products Officials Visit U.S.

Korean industry and government forest product officials recently toured the United States at the invitation of FAS. The trip was planned to demonstrate to the Koreans that the United States is a reliable supplier with a variety of wood products available for export and to focus attention on the need for Korea to reduce its tariffs on processed wood products.

In Washington and Oregon, the group visited the Western Wood Products Association, the American Plywood Association, the Weyerhaeuser Company, several plywood mills, housing construction sites and lumber producers. In Indiana, the team met with officials of the Fine Hardwoods/American Walnut Association and the Webb Veneer Company to see U.S. hardwood production. In Washington, D.C., they met with USDA officials and representatives of the National Forest Products Association, to discuss the lowering of Korean tariffs on processed wood products and technical and research activities.

Japanese Steak Promotion Reaches One Million Consumers

A recent **U.S. Meat Export Federation (MEF)** American Steak Fair in 45 Big Boy restaurants in Japan reached more than a million customers. During the promotion, Big Boy restaurants, a \$22-million-a-year sales company, sold 16 tons of U.S. beef in its restaurants in Tokyo and Osaka. MEF Asian Director Phil Seng said that the restaurant has indicated that it will continue the promotion beyond the dates originally set for the fair.

MEF Hosts Variety Meats Luncheon in Mexico City

Mexican meat importers, retailers, processors and hotel/restaurant representatives attended an **MEF** luncheon in Mexico City in December. The luncheon demonstrated different ways U.S. variety meats can be served.

Oxtail soup, pork liver pate, calf kidneys sauteed in red wine and pork tripe sausage in mustard and cream sauce were among the dishes created and prepared by one of Mexico City's leading chefs.

The tasting luncheon was the first activity of its kind to be held in Mexico, a major importer of U.S. variety meats, particularly of pork. During the first eight months of 1984, Mexico was the leading importer of U.S. pork offals, buying 7,236 tons—23 percent of U.S. exports. In 1985, Mexico is expected to issue import licenses for 50,000 tons of variety meats.

"Allowing importers and restaurant personnel to see and taste the quality of U.S. offals and showing them new ways to prepare variety meats should stimulate sales of U.S. offals to Mexico," said Don Hellbusch, MEF Latin America/Caribbean Director.

The Magazine for Business Firms Selling U.S. Farm Products Overseas

Published by U.S. Department of Agriculture Foreign Agricultural Service

Managing Editor Lynn K. Goldsbrough

Design Director Vincent Hughes

Writers Robb Deigh David Garten Edwin N. Moffett Maureen Quinn Aubrey C. Robinson Geraldine Schumacher

Text of this magazine may be reprinted freely. Photographs may not be reprinted without permission. Contact the Design Director on (202) 447-6281 for instructions. Use of commercial and trade names does not imply approval or constitute endorsement by USDA or the Foreign Agricultural Service. The Secretary of Agriculture has determined that publication of this periodical is necessary in the transaction of public business required by law of this Department. Use of funds for printing Foreign Agriculture has been approved by the Director, Office of Management and Budget, through March 31, 1987. Yearly subscription rate \$16.00 domestic, \$20.00 foreign, single copies \$2.75 domestic, \$3.45 foreign. Order from Superintendent of Documents, Government Printing Office, Washington, DC 20402.

Features

China's Farmers Shift Into High Gear	4
In little over six years, dramatic changes in the structure of China's agricultural system have reaped a huge success.	
China's Agricultural Gains Unlikely To Match Growth of Recent Years	10
Although Chinese production of farm commodities will advance, projections for the next five years show a diminishing rate of increase.	
Breeds and Feeds: The Future of U.SChinese Trade	15
The phenomenal changes taking place in Chinese agriculture may change the commodity makeup of U.SChinese trade.	
U.S. Oilseeds Scoring High With Asian Customers	17
Six Asian markets now account for nearly one-fourth of total U.S. oilseed and product exports.	
Investing in Developing Countries Can Pay Off	18
Developing countries offer many investment opportunities for U.S. agribusinesses.	
International Trade Network Links Buyers and Sellers	20
USDA's new Buyer Alert Program uses high-speed telecommunications to send sales announcements of U.S. food and agricultural products to interested buyers overseas every week.	

Departments

Marketing News	2
Country Briefs	21

China's Farmers Shift Into High Gear



By Terry Taylor

Scoring phenomenal gains in agricultural production over the last six years, China has become the world's No. 1 producer of wheat, rice, cotton and tobacco.

With an arable land mass of 250 million acres and a population now over 1 billion, China has never lacked the need and potential for abundant farm output. However, since 1949 and the so-called "liberation" under Mao Zedong (Mao Tsetung), the effort to tap China's agricultural resources has been a struggle of two opposing economic philosophies. They are indirect planning, which makes room for private enterprise, and direct planning, in which the state controls all.

How the Two Systems Work

Indirect planning involves individual contracts, taxes, price policy and state control of credit. Prices are varied to shape the market by providing incentives to increase production and influence the distribution of crops. Under indirect

planning, private farm plots and rural markets are sanctioned by the state.

When the harder line elements of central, or direct, planners are in charge, cropping patterns, output targets and the size and location of areas to be sown are directly controlled. Private farm plots and rural markets are curtailed or forbidden.

Central planning in China stresses an egalitarian philosophy which seeks food security for everyone, a concept the Chinese describe with the slogan: "Eating out of the same big rice bowl." In contrast, indirect planning seeks the same end but by encouraging self-interest and personal incentives to spur agricultural growth.

China's Agriculture Buffeted by Opposing Approaches

Proponents of the two economic approaches have vied for control throughout modern Chinese history, resulting in unpredictable ups and downs in farm production.



During the land reform era of 1949 to 1956, indirect planning was in vogue—price controls and price incentives were used to allocate sown area and stimulate production.

A subsequent movement to Agricultural Producer Cooperatives (APCs) and the initiation of compulsory delivery quotas to the central government set the stage for direct planning and Mao Zedong's "Great Leap Forward," which lasted from 1958 until 1960.

Under Mao, significant grain flows between provinces were curtailed to enforce regional self-sufficiency in production. Private plots and rural markets were abolished, and the use of price as a determinant of resource allocation was abandoned.

Misdirection by inexperienced party leaders, along with bad weather, led to a crisis in agriculture and large-scale famine in 1961, a turn of events which forced a revival of indirect planning and the importation of large amounts of grain.

Despite the setbacks and their negative impact on his influence, Mao by 1966 was ready for another push in his fight to make China more truly socialized. His new effort, known as "The Cultural Revolution," lasted until 1976, bringing with it severe restrictions on personal initiative.

During this period, agriculture began to stagnate and national self-sufficiency in grain production became a dim hope. The death of Mao and the removal of the "Gang of Four" moved China's economic policy back toward indirect planning.

A Time for Bold Changes

The Third Chinese Communist Party Plenary Session in 1978 removed some of the dampers Mao had placed on personal initiative and established a system promising bigger profits for the more successful farmers.

The so-called "responsibility" or "contract system" encourages more work, better organization and a more resourceful attitude.





Larger profits also motivate farmers to try new, more efficient methods of farming. The use of hybrid rice, for example, rose by 50 percent from 1978 to 1983. During the same period, wheat production became more efficient, rising 51 percent even while planted areas were cut by 5.5 percent. In fact, China has grown as much grain in the past five years as it did in the previous 20.

Advances in production allowed diversification and specialization so that farmers could move into previously neglected areas, such as aquaculture.

In turn, specialization hastened the change from subsistence farming to market-oriented production. And in 1983, three-fifths of the total agricultural production was sold at market, a sharp increase since 1978.

Personal Responsibility: An Experiment Which Seems To Be Working

State officials describe the "responsibility system" as a reflection of the socialist distribution principle: "To each according to his work."

However described, it appears to be working. Since 1978, China's cotton output has risen 150 percent; oilseed crops, 84 percent; wheat, 58 percent; rice, 27 percent; and coarse grains, 19 percent.

In rural areas, average per capita income rose to 270 yuan (\$115) in 1982, a gain of 17 percent over the previous year.

Among the negative points that have been raised is a concern that the system encourages smaller farm plots and a shrinking scale of operation, which may hinder modernization, especially mechanization. But so far that has not been a problem.

Personal incentives to produce more are not limited merely to the specialized households. Partial lifting of state monopolies has made it possible for private individuals to enter the trading sector. Rural workers now may sell surplus production on the free market, providing they have met their obligations

China Introduces New Farm Policy Changes

In recent months, China has changed the ways in which its farmers produce and market their commodities. Here is a brief rundown of the changes, by commodity:

Cotton: State cotton procurement will be limited to 19.5 million bales in 1985. Moreover, the new policy calls for more extensive use of improved-quality cotton differentials for cotton quality.

Cotton production in excess of 19.5 million bales is to be sold in free markets with cotton-producing counties selling directly to commercial concerns in large cities. The intent of the program is to reduce surplus production while improving the overall quality of Chinese cotton.

Tobacco: Beginning Jan. 1, 1985, all tobacco-related import and export business is conducted by the China Tobacco Import and Export Corporation (CTIEC). This is a newly established national foreign trade enterprise under the auspices of the China National Tobacco Corporation. CTIEC's foreign trade organization registration will allow it to conduct business directly with foreign trade companies.

CTIEC is responsible for importing and exporting leaf tobacco, tobacco products and all cigarette processing and packaging technology. The organization also is empowered to enter into all forms of economic and technical cooperation with foreign entities. The head office is located in Beijing. Branches are to be opened in Shanghai, Guangdong, Fujian, Hubei and Dalian.

Grain: Since the reforms announced in December 1984, China has been deemphasizing grain production, although it has stopped short of any actual restrictions. Despite near-term surpluses, long-term needs are great. But certain areas, where grain surpluses exist, are being encouraged to increase cash crop area for such commodities as sugar beets and cane, peanuts and other oilseeds and fruits and vegetables.

Grain and other food processing—both by individuals and government units—is being encouraged for such items as bakery products, liquor production and bean curd making.

In the past, grain for feed use was not eligible for a price subsidy, but now feed prices are being allowed to float downward.

Rural marketing and distribution is being developed with the removal of restrictions on commodity movement between provinces and encouragement of middlemen in the marketing process.

Livestock: China's emphasis for the next five-year plan will be on increasing animal protein production and intake. The current price structure that obstructs incentive for meat production is to be adjusted. In addition to emphasis on feed production, procurement prices for meat also are being adjusted to consider quality and leanness in addition to quantity.

China's dairy industry is the weakest of the livestock subsectors. Emphasis will be placed on expanding the dairy cattle population with high-yielding cattle.

—Susan Scurlock, former assistant agricultural attache, Beijing.

to the state. Recent legislation also has allowed farmers to transport their commodities for sale across provincial boundaries.

Procurement Prices Boost Income

In addition to restructuring agriculture in 1979, the Plenary raised state procurement prices by almost 25 percent. For three decades prior to then, farm

income had been on the decline. Material incentives were so low labor productivity fell despite increased capital input.

Raising the prices the state pays for commodities, coupled with higher production rates, has greatly increased farmers' incomes.



Additional concerns include a responsibility system that puts a premium on family labor, conflicting with the birth control program, and the environmental impact of increased demand for tillable land, thus pushing cultivation into very marginal (e.g. erodable) areas.

The state still assumes collective responsibilities like integrated crop planning and management, the purchase of large machinery, pest control and water conservation.

The term "responsibility system" covers many forms of contracting between peasant groups and the state. The most usual form assumed its present character in 1981 with the demise of the collective distribution of income. Individual farm families can now contract with the production team for the land allocated to them and become totally responsible for their own profits and losses.

In turn, the family has definite responsibilities, including:

- —Supplying the state with a certain quota of its crops.
- —Paying the state agricultural tax.

—Abiding by the birth control targets.
 —Paying the team a portion of its crop profits for deliveries of farm inputs such as fertilizer and electricity.

In effect, the responsibility system has all but done away with collectivization. Labor organization and the management of production and distribution have been left largely in the hands of individual families.

The central government continues to develop plans for the production of agricultural commodities but not to the extent that it once did. For example, grain that the state contracted for accounted for only 15 percent of the total yearly production by peasant households in 1983.

Government policy comes more into play in matters of a broader scope such as agricultural investment, technology distribution, determination of crop geography, procurement prices, relative development rates among branches of agriculture and the direction and speed of agricultural development.

Specialized Farming on the Rise

By creating the incentives that have bolstered production, the responsibility system has made it possible for more farmers to specialize in producing for the market, thus changing the traditional division of rural labor.

About 85 percent of the farm families produce mostly for their own consumption, contributing no more than 20 percent of their harvest to the state by paying taxes-in-kind and selling surplus grain. Specialized households devote most or all of their labor to producing commodities for sale at market.

In Anhui Province, more than 60,000 rural households now specialize in grain production, each selling 5-20 tons a year to the state, compared with less than 1 ton for an average family.

Members of specialized households are usually the best farmers in their villages and are allowed to manage much larger family farms so that their abilities are used to the fullest extent possible.

Moreover, procurement price changes help farmers decide what to plant. The price of raw cotton, for example, increased by 15 percent in 1979 with little effect on planted area. When the price went up an additional 10 percent the following year, plantings increased sharply.

As effective as price hikes have been in raising income and getting farmers to plant new crops, additional price rises are unlikely in the near future because they will pose more problems for the already burdened national economy.

Recent increases have accounted for some 20 percent of the government budget revenues. Moreover, policymakers are having second thoughts about the high cost of subsidizing the diet of urban dwellers with artificially low prices.

Quotas Abolished

In an effort to combat the tremendous drain on the national budget caused by mandatory state procurement and price subsidies, the Chinese government recently announced that it will scrap its 35-year monopoly on food grain purchases and delivery.

The system of agricultural production quotas, with its fixed, unified quota price and above-quota bonus price has in effect been abolished.

These moves are designed to shift production out of grain and into other commodities and ease transportation and storage problems caused by recent large harvests. They will also move China toward a more market-oriented system.

Farmers Share Investment Burden

General Secretary Hu Yaobang said in 1982 that the state could no longer increase the prices of agricultural products, lower the level of legal or quota procurement or make broader use of negotiated prices in order to raise farmers' incomes.

State capital investments in agricultural and irrigation facilities began to diminish in the late 1970s. It is hoped that private



savings, which have more than tripled in the rural areas since 1979, may help take up the slack and be at least partly invested in agriculture.

The government has shown concern that farmers may stop participating in capital investments in agricultural projects. As a result, the state is seeking to mobilize farmers to work on such projects for a fixed number of days every year.

Recently, contracts signed under the responsibility system have specified the number of unpaid workdays to be contributed to the construction and maintenance of roads and irrigation facilities.

Keeping Farming Modern

Clearly, farmers have been sinking some of their increased income back into their farms. The surge in agricultural production is at least partly due to the modern application of chemical fertilizers, which the farmers have to pay for out of their own pockets.

To manufacture chemical fertilizers, China uses large-scale modern plants and small local plants established during the Great Leap Forward. However, since the initiation of the farm policy defined by the Plenary in 1978, further investment in fertilizer plants has been sharply reduced.

The reduction may not be critical to many regions, which have come face to face with the law of diminishing returns. From 1965 to 1970, 1 kilogram of chemical fertilizer brought a yield increase of nearly 50 kilograms; from 1970 to 1975, it was 23 kilograms; and from 1975 to 1980, the increase was only 9 kilograms.

Mechanization Still Has Far To Go

Agricultural mechanization has been a goal in China's modernization plans. After the First National Agricultural

Mechanization Conference in 1966, manufacturers of small- and mediumsized machinery were rapidly established throughout the country.

The expansion was particularly apparent during the Cultural Revolution, when China created more than 1,900 farm machinery plants and 2,400 county-level repair plants. In 1970, China had only 73,000 tractors, by 1982 they had more than 2 million. During the same period the number of draft animals also increased by almost 20 percent.

Can China Keep Up the Pace?

The recent increases in agricultural production are due to a combination of factors: improved management of production resources, restructuring of government economic emphasis away from heavy industry, increases in personal incentives for rural families, more efficient use of manpower, specialization and modernization.

In the 1980-83 period, agricultural production increased at an annual rate of about 8 percent, greatly outstripping the state target of 5 percent. This target was set to fulfill the long-term plan emphasizing a more diversified agriculture that did not place a heavy priority on grain production. Since the Plenary in 1978, livestock and cash crop production have mushroomed in response to the new structure.

The continuing encouragement of efficiency and the shift to production of cash crops have raised fears that the gap between poor and wealthy farm regions will widen. It can be expected that the state will move to insure that poorer farmers have access to modern production facilities and are able to share in the new wealth flowing into the rural sector.

Barring any sudden shifts back toward more direct control, China should continue its agricultural advance, but at a diminishing rate.

The author is with the Foreign Production Estimates Division, FAS. Tel. (202) 382-8882.



China at a Glance

Land

Some 9.6 million square kilometers; 74.3 percent desert, waste or urban (32 percent of this area consists largely of denuded wasteland, plains, rolling hills and basins of which about 3 percent could be reclaimed); 11 percent cultivated (sown area extended by multicropping); 12.7 percent forest and woodland; 2-3 percent inland water.

People

Population: 1,034,907,000 (July 1984), average annual growth rate 1.2 percent.

Ethnic divisions: 93.3 percent Han Chinese; 6.7 percent Zhuang, Uygur, Hui, Yi, Tibetan, Miao, Manchu, Mongol, Buyi, Korean and numerous lesser nationalities.

Language: Standard Chinese (Putonghua) or Mandarin (based on the Beijing dialect); also Yue (Cantonese), Wu (Shanghainese), Minbei (Fuzhou), Minnan (Hokkien-Taiwanese), Xiang, Gan, Hakka dialects and minority languages (see ethnic divisions).

Literacy: Over 75 percent.

Labor force: est. 447.1 million (December 1983); 74.4 percent agriculture; 15 percent industry and commerce, 10.6 percent other.

Government

Official name: People's Republic of China.

Type: Communist state; real authority lies with Communist Party's Political Bureau. The National People's Congress, in theory the highest organ of government, usually ratifies the party's programs. The State Council actually directs the government.

Capital: Beijing (Peking). Political subdivisions: 21 provinces, 3 centrally governed municipalities and 5 autonomous regions.

National holiday: National Day, October 1.

Branches: Control is exercised by Chinese Communist Party, through State Council, which supervises ministries, commissions, bureaus, etc., all technically under the Standing Committee of the National People's Congress.

Government leaders: ZHAO Ziyang, Premier of State Council; LI Xiannian, President; PENG Zhen, Chairman of NPC Standing Committee.

Economy

GNP: \$313 billion (1983 est.), \$308 per capita.

Agriculture: Main crops—rice, wheat, other grains, oilseeds, cotton, agriculture mainly subsistence; grain imports 10 million tons in 1984.

Major industries: Iron, steel, coal, machine building, armaments, textiles, petroleum.

Shortages: Complex machinery and equipment, highly skilled scientists and technicians, energy and transport.

Exports: \$23.5 billion (f.o.b., 1982); manufactured goods, agricultural products, oil, minerals.

Imports: \$16.6 billion (f.o.b., 1982); grain, chemical fertilizer, steel, industrial raw materials, machinery, equipment.

Major trading partners: Japan, Hong Kong, United States, West Germany, Canada, Australia and Singapore (1982).

China's Agricultural Gains Unlikely To Match Growth of Recent Years





By Terry Taylor

Since the late 1970s, Chinese farmers have impressed the world and even Chinese agricultural planners themselves with their robust gains in farm productivity. And although output for the remainder of the decade is expected to continue to increase, it will be at a slower rate than in recent years.

It only took six years for China to become the world's largest producer of wheat, rice, cotton and tobacco and the second largest (after the United States) of coarse grains and oilseeds. But China may have difficulty maintaining the great leaps in production enjoyed in recent years.

The reasons are many. The gains in yields as China's farmers began to use improved seed varieties, more fertilizer and better management techniques will increase only to a point. In some ways, China has been too successful—burgeoning supplies in some provinces strain inadequate storage facilities and clog the nation's underdeveloped infrastructure.

Other factors, such as declining state capital investment, difficulty in mobilizing labor and diminishing returns from increases in producers' prices eventually will have an impact on production.

For the remainder of the decade, most crop production will diversify away from grain with greater emphasis on cash crops, animal protein output and the industries that support them.

0

Here, then, is a brief look at projected production for major commodities through 1990.

Total Grain

Unlike the United States, the Chinese define grain (or *liangshi*) production to include soybeans and tubers (roughly 10 percent of output in the 1980s). Total grain production by 1990 will approach 465 million metric tons (or 405 million according to the U.S. definition).

Grain production of this magnitude would give the Chinese a grain surplus of 205 million tons accumulated during 1985-90. Some of this surplus would be used to feed the growth in population; most of it, however, will be channeled toward meat production, industrial products or exported.

A high-level Chinese official has stated that China will shift gradually from a country importing grains, cotton and cooking oil to an exporter of all these products.

Production plans for 500 million tons of grain by the year 2000 are quite possible given currrent trends. Self-sufficiency in grain output may be possible, but will not be realized in the near future and will depend, to a great extent, on the rate of infrastructure development.

Wheat

China's wheat production is expected to increase 21 percent by 1990 to 98 million tons, with yields up 27 percent on slightly reduced area.

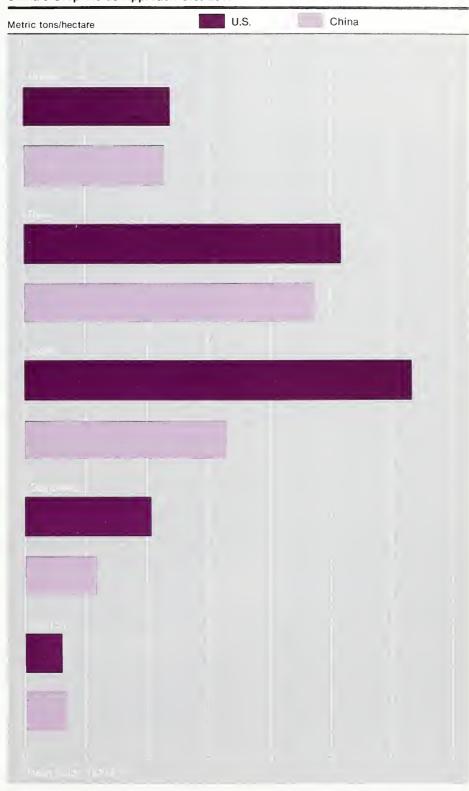
Wheat imports have been volatile since the early 1960s (2 million tons in 1976; 12 million in 1981), but have remained high despite record grain production.

U.S. and Argentine wheat exports to China have slowed since 1982 and have dropped sharply in value due to the decline in wheat prices. However, China has increased its wheat imports from Australia and Canada.

Rice

Rice yields during 1983-90 are expected to rise by 15 percent to 5.6 tons per hectare—roughly equal to those of present day Japan. Despite reduced

China's Crop Yields Approach U.S. Level¹



sown area, Chinese rice production in 1990 will approach 132 million tons (milled basis).

Rising domestic rice consumption, the relative price disadvantage of rice to wheat and reductions in imports by China's principal trading partners have reduced rice exports.

In terms of its foreign currency balance, China previously realized an advantage to importing relatively inexpensive wheat and exporting rice—mainly to Japan, Indonesia and Sri Lanka. This pattern has changed, however, and as a result China is restraining rice exports while maintaining wheat import levels.

Coarse Grains

Coarse grain production is projected at 110 million tons in 1990, about 20 percent higher than in 1984, with area remaining stable.

Although some corn still is used for human consumption in China, rising demand for animal protein products will translate into increased demand for feed corn.

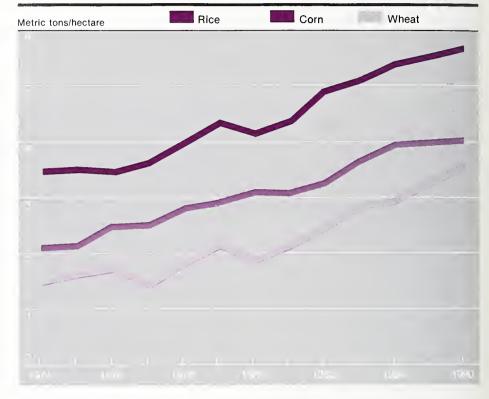
The United States, Thailand and Argentina have been China's sources for imported corn. China's bumper corn crops in 1983 and 1984 sharply dampened demand for foreign corn, however, and the Chinese are facing the big question of how to best utilize these huge harvests.

Storage is an acute problem in the Northeast Plain provinces of Heilongjiang and Jilin. The fledgling feed corn processing industry cannot handle the surplus, and China's transportation network is not adequate to move crops efficiently and economically from surplus to deficit areas.

To handle some of the surplus, China introduced a crash program to expand feed and processing plants, and encouraged more "specialized households" to raise livestock, using corn as feed. In addition, corn exports to Asian neighbors have increased.

Barley has been imported from Australia, and demand surged from 25,000 tons in 1981 to 150,000 in 1984—mainly for brewing purposes to meet the rising demand for beer.

Rate of China's Grain Yield Will Slow Somewhat



No discussion of China's coarse grain output is complete without mentioning the country's ambitious plans for feed production to supply growing livestock and poultry sectors.

Recent statements by the Feed Industry Department indicate that the State Economic Commission plans to spend the equivalent of \$300 million over the next six years to improve feed processing and the production of additives.

China's current problems in the feed industry include poor quality, inadequate equipment, low productivity, limited variety and low investment.

Total domestic demand for feed is now about 60 million tons annually. China produced 8 million tons of processed feed in 1984, 15 percent more than in 1983. Ambitious plans look forward to producing 50 million tons in 1990 and more than 100 million tons in the year 2000.

These plans call for a combination of foreign technological assistance, new feed manufacturing techniques and new equipment to revamp 3,000 domestic feed processing plants.

Oilseeds

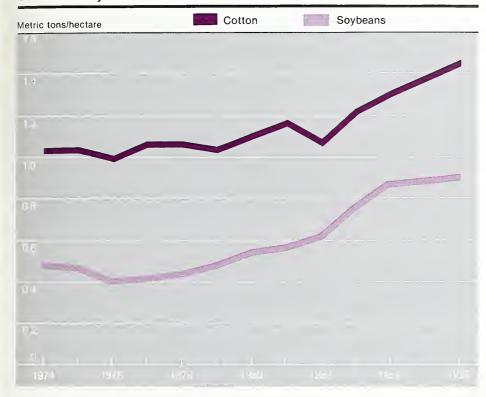
Oilseed production in 1990 will be an estimated 35 million tons, up by about 6 million tons over 1984. Area will expand by a projected 1 million hectares, mainly at the expense of grains.

Most of this area increase will be in soybeans; a rise in yields to 1.4 tons per hectare will put soybean production at approximately 12.25 million tons in 1990.

The United States and Argentina traditionally have exported soybeans to China, although China exports beans to Japan and other Asian countries.

Soybeans are an important component in the program to expand Chinese livestock production, and the American Soybean

Cotton and Soybeans Show Modest Increase in Yields



Association and the U.S. Feed Grains Council are working with the Chinese to increase the utilization of soybean meal and the output of improved livestock feeds.

Modest increases in the production of sunflowerseed, peanuts and rapeseed are expected, offsetting a decline in cottonseed output.

Cotton

Cotton is the main cash crop in terms of sown area, but production through 1990 is difficult to project despite the State Council's recent announcement limiting cotton procurement to 19.5 million bales. The Chinese have had four consecutive record crops as a result of their cotton incentive program. With abundant supplies, further area decreases are anticipated.

Rising prices of raw cotton to mills and emerging consumer preferences toward synthetics contributed to an estimated 13-percent decrease in raw cotton

consumption during 1983/84. This year's production of about 26.0 million bales greatly exceeds the estimated domestic consumption of 16 million bales.

Despite low domestic demand and fierce competition for world export markets, efforts by the Chinese government to restrict production have been largely unsuccessful

Government policy has favored cotton over the past six years. Use of fertilizer has escalated; irrigated area has increased dramatically in some areas; and both grain and agricultural chemicals have been awarded for growing quotas of cotton.

The rise in the price of cotton since 1979 has been significant, reportedly as much as 50 percent. The economic return for growing cotton is is about four times that of grain. As a result, output and sown area have both increased.

Assuming greater success in cutbacks in the future, output could stabilize at about 22 million bales in 1990. Yields are now slightly above the U.S. level.

China is now able to supply the raw cotton requirements of its mills from domestic supplies. The world's largest importer in 1979/80, China has emerged as a major cotton exporter this season. It ranks third, following the United States and the Soviet Union, in forecast 1984/85 export volume.

Tobacco

As with cotton, the Chinese government will attempt to curtail the expansion of tobacco area. China is the world's largest tobacco producer, with production four times what it was a decade ago. Production increased so much in 1981 that the government now will procure only tobacco that farmers are authorized to grow. As a result of this policy, leaf production dropped 35 percent in 1983 from the 1981 level.

Despite skyrocketing production, China continues to import small amounts of leaf from India, Zimbabwe and Zambia.

Tobacco production is projected at 1.5 million tons in 1990. With huge stocks available, China still has not made any significant export efforts, but this policy could change in the future.

Sugar

Sugar crops are projected at 60 million tons in 1990—almost 50 percent above 1982 levels. Sugar imports have been cyclical, with tonnage varying from 917,000 tons in 1980 to 2.480 million in 1982. Since 1982, imports have dropped markedly to an estimated 1.36 million tons in 1984.

Increased area and higher yields in both sugarcane and sugarbeets have resulted in increased production which reached an estimated 4.29 million tons in the I984/85 refining season. Even so, domestic demand by consumers and the food processing industry has not been met.

The drop in the market price of sugar in 1982 was a big factor in the large import level. Cuba has been the traditional supplier. Other main suppliers include Australia, Thailand and the Philippines, but all have been losing ground to Cuba.

Even with the estimated increase in domestic production, China is expected to remain a net sugar importer indefinitely.

Livestock, Dairy and Poultry

China's population of hogs, cattle, sheep and goats combined is the largest in the world. It is also one of the least efficient sectors of Chinese agriculture. Efforts are being made to modernize production practices through the adoption of compound feed and protein feed additives along with advances in animal breeding.

All this is targeted toward increasing the economic return and efficiency of meat, dairy and egg production. These products are generally in short supply, partly because of distribution problems. As higher rural incomes generate increased consumption, availability of these items in urban areas declines.

Hog Sector Is the Largest

Pork is the most common and least expensive form of meat in China, representing approximately 95 percent of total meat production (excluding poultry).

Swine numbered 297 million in January 1985, the world's largest population. Production is mainly by individual households which own one to five hogs and make their own feed.

The national annual per capita pork consumption was 12.3 kilograms in 1983, 4.6 kilograms more than in 1978. Procurement prices have risen by almost 50 percent in recent years and farmers were given the option to buy 25 kilograms of feed grains at ration prices for each pig sold to the State.

Pig raising is profitable with production costs only about half of sale price. The manure also is highly valued as fertilizer.

China is a major exporter of live hogs and frozen pork, mainly to Hong Kong. Live animal exports totaled 3.3 million head in 1983, compared with 2.31 million in 1976.

In spite of the upward trend in pig numbers in the mid-to-late 1970s, slaughter rates remained unchanged in

Major Commodities Will Score Gains in Production

Commodity	1983	1990	Percent Change	Area
	Millio	n tons	Percent	
Coarse grains	92.0	110.0	+ 20	Same
Cotton 1	21.3	23.0	+ 6	Down
Oilseeds	27.1	35.0	+ 17	Up
Rice	118.0	131.0	+11	Down
Tobacco	1.4	1.5	+ 7	Down
Wheat	81.0	98.0	+21	Down

¹ Million bales.

response to the government's policy of raising pigs for the production of organic fertilizer rather than pork.

This policy changed in 1979 and the slaughter rate rose sharply due to an increase in the procurement price. Today the emphasis on meat production is reflected by both the increased slaughter rate and in the amount of meat produced per pig.

Still, current small-scale private swine production cannot meet the rising demand; specialized operations and consequent increased feed demand are inevitable.

Changes in the Beef Sector

While swine are kept mainly by individuals, cattle essentially are kept by collectives. Large domestic animals have been owned by collectives and used as draft animals. Recently, however, the responsibility system (see article on page 4) has brought about a reversal and increased the percentage of privately owned draft animals.

Per capita beef consumption averages under 5 kilograms and is principally from old and disabled draft animals.

A change in taste toward leaner meat points to a trend where future increases in meat production will require more grain per unit of meat, and will be accompanied by an overall drop in the meat production growth rate.

The long-term plan calls for an annual growth rate of 3.4 percent to the year 2000. Rates will likely be nearer 6 percent to 1990. Higher rates of

production will require high rates of grain production and a change in the price structure that now discriminates against the use of feed for animal consumption.

Dairy Industry Targeted for Growth

China's milk supply is inadequate. As a result, the government has instituted policies to develop the dairy industry.

Per capita milk consumption is only about 1.5 kilograms a year. In cities, children and the elderly are given priority.

The dairy cow population numbered only 410,000 adult cows in 1982 and produced 1.6 million tons of milk. State farms raise 36 percent of the total Chinese herd of 700,000 animals.

Poultry Industry Adequate Despite Problems

Although eggs and poultry also are in short supply in China, officials consider poultry numbers adequate. The poultry sector has many problems in common with animal husbandry: poor feeding methods, inferior breeds, small-scale household operations and lack of widespread marketing.

Per capita consumption of eggs and chicken is only about 2 kilograms annually, even though the number of chickens sent to market increased nearly fourfold since 1978. Chicken is twice as expensive as pork.

The author is with the Foreign Production Estimates Division, FAS. Tel. (202) 382-8882.

at which is a second to the local terms of the second

Breeds and Feeds: The Future of U.S.-Chinese Trade



By Norman Kallemeyn and Terry Taylor

The rapid increases and significant changes taking place in Chinese agriculture also will alter the makeup of U.S.-Chinese farm trade. As China's agriculture becomes more self-sufficient, there will be new import needs for U.S. and world exporters to meet.

Since the late 1970s, U.S. agricultural exports to China have consisted primarily of wheat and corn, reaching a peak of 6.4 million tons of wheat and 1.8 million tons of corn in 1980.

The commodity mix of U.S.-Chinese agricultural trade generally reflects the emphasis of existing five-year plans in China. For example, the 1981-85 plan stresses increased agricultural production of basic commodities—grains, oilseeds, cotton, tobacco, etc. The goal has been to improve the quality of Chinese diets, particularly in rural areas, where even grain consumption has been less than in urban areas.

Grain imports and sharp increases in domestic production have eliminated the grain shortages of the past, enabling China to begin agricultural diversification and move away from food rationing to a stage where income will be the primary determinant in food consumption patterns.

The Future of Grain Imports

Large-scale grain imports have been particularly important in provisioning China's large urban centers and in maintaining the grain reserve. These imports have decreased the burden on the internal transport system and eased the extraction pressure on farmers. It is often simpler and cheaper to ship grain from the U.S. West Coast to Tianjin than to transport it overland from remote surplus-producing provinces.

China's ability to move grain internally in an efficient manner is hampered by bureaucratic procedures, price inflexibility, primitive transportation facilities, lack of distribution networks and lack of marketing experience. In 1980, imports of grain represented about one-seventh of China's grain supply. China has been a net importer of grain since 1961, and although recent restructuring of agriculture and movement toward direct planning have combined with favorable weather to produce surpluses of agricultural products, it is highly likely that China will remain a net importer for the foreseeable future.

Rising commodity production is linked to a poorly developed infrastructure that will cause grain imports to continue until 1990. Production in excess of capacity of the developing infrastructure, particularly in the coastal provinces, will alternately move onto the international market.

A Shift to More Animal Protein

China's Seventh Five-Year Plan (1986-90) will emphasize livestock and poultry production. Consequently, the shift in U.S.-Chinese trade will reflect this emphasis of turning grain into animal protein.

The force behind China's expanding livestock and poultry industries has been increased consumer demand for meat, milk and eggs, as well as crop surpluses that are straining rural storage and transport facilties.

The Chinese want to double the annual intake of meat, eggs and fish from 16 kilograms per year to what is viewed as a satisfactory level of 30 kilograms.

In addition, an increase in animal numbers would also increase organic fertilizer supplies for crop production.

Breeds and Feeds

Long-range targets call for tenfold and twentyfold production increases for some livestock products by the year 2000. Two strategies for pursuing these goals are:

- —Improve both the quantity and quality of herds and flocks, with particular emphasis on introducing improved genetics.
- —Develop the feed industry by expanding milling capacity and overall feed availability and by using more additives and pre-mixes.

As plans for livestock and poultry production are realized, there will be a huge demand for feed grains—both imported and domestic—to meet animal producers needs.

Per capita grain consumption in China is only one-fourth that of the United States, although U.S. consumption is mainly used in meat production.

Other Opportunities

Although China will most likely continue to import live animals, several officials have indicated that China would prefer to import semen, embryos and the relevant technology.

New Zealand recently signed a bovine semen trade agreement with China. In November, the United Kingdom signed a veterinary protocol with China covering U.K. exports of bovine semen; an agreement on embryo trade is expected to be signed in early spring. West Germany has donated animal embryos to China.

In addition, appeals have been made to expand production of high-protein lean meat such as cows, sheep, rabbits and poultry.

An official of China's livestock importing agency has stated that efforts in the hog sector will focus on increasing the percentage of lean meat. Overseas purchases of hogs will probably total several hundred head a year over the near future. Some imported hogs would be crossbred with local varieties, while others would be kept purely for building up numbers of a certain type.

A Growing Dairy Industry

Good potential also exists for dairy breeding stock and dairy technology, given the initiative underway in the dairy sector.

An official of the China National Animal Breeding Stock Import and Export Corporation (CABS) has said that imports of high-yielding dairy cattle, primarily Holstein-Friesian, will be in the 1,000-2,000 head range at least for the short term. CABS is interested in U.S. dairy cattle and had a buying team in the United States in December.

Other countries also are interested in getting involved in the Chinese dairy industry. Japan and China have signed an agreement under which Japan will supply 100-200 head of dairy cattle per year in exchange for 1,000 head of Chinese beef cattle for slaughter.

Last year, the Netherlands shipped 260 head of Holstein-Friesian cattle to China, while West Germany sold 400 head.

There are several ways in which U.S. exporters and dairy breed associations can improve their marketing prospects in China: meet personally with leaders in China's livestock industry; offer assistance through feeding, breeding and animal health seminars; conduct detailed discussions on breeds and their capability; and invite Chinese dairy production specialists to visit U.S. breeding stations, dairy farms and other facilities.

Opportunities for Feed Suppliers

In the feed sector, three areas of emphasis have been identified:

- —There is a keen interest in raising the return on feed by increasing the use of additives and pre-mixes.
- —Emphasis will probably be continued on increasing the supply of raw feed ingredients, although localized grain surpluses have outstripped demand for feed ingredients in some area.
- —Calls have been made to increase the variety of feeds by relating feed composition to availability and price.

For U.S. livestock and related suppliers, China's emphasis on animal and feed production are translating into market opportunities for animal genetics and feed milling equipment and technology.

Addressing Agricultural Inbalances

China is attempting to address the unbalanced structure of its agriculture as well. While grains, cotton, edible oilseeds and other crops have developed swiftly, animal husbandry, fishery and forestry sectors are still comparatively weak.

At the same time, officials have expressed interest in rapidly developing processing industries for such commodities as grain, fiber, meat, edible oil, vegetables and fruit. Previously, these industries were mainly located in cities; in the future, they will be moved to rural areas, close to production sites.

Plans are underway to move more than half the rural population away from cultivation into animal raising, fish farming, processing, transport, commerce and service trades. This would not only increase the rural products sold in the market and bring better living standards to the countryside, but will also gradually reduce the differences between urban and rural areas.

Kallemeyn is agricultural counselor, Beijing, and Taylor is with the Foreign Production Estimates Division, FAS. Tel. (202) 382-8882.

STATE OF THE STATE

U.S. Oilseeds Scoring High With Asian Customers

By Judith G. Goldich

Six Asian countries are becoming increasingly important to U.S. oilseed producers and exporters. Indonesia, Malaysia, the Philippines, Korea, Japan and Taiwan now account for nearly one-fourth of U.S. exports of oilseeds and products.

Prospects for expanding export sales to these Far Eastern markets are reflected in the region's growing demand for livestock products and increasing use of soybeans, peanuts and coconuts for food.

Although soybeans alone accounted for about 90 percent of the value of U.S. oilseed and product exports to the region, nearly half a million tons of U.S. soybean meal were shipped to these markets in fiscal 1984.

The Philippines and Indonesia are the region's major importers of meal and oil. However, both countries either have processing plants in place or are planning to build new ones. Increased crushing capacity will eventually lessen the need for imported soybean meal, but will create additional demand for soybeans.

U.S. exports of oilseed and products rose 14 percent in fiscal 1984 to almost \$2.2 billion. Soybean sales gained 12 percent to \$2.0 billion.

Major Producer of Vegetable Oils

Despite its deficit in protein meals, the region is the world's largest exporter of vegetable oils. This limits prospects for high-volume sales of vegetable oils from the United States.

Oversupplies of locally produced vegetable oils also could depress soybean demand, and the entrance of China and Brazil in the region's soybean meal market works to the detriment of U.S. exporters.

Oilseed Output Fluctuates

Over the past decade, oilseed output in the six Asian countries has fluctuated widely, with most of the variations occurring in copra production. Palm kernel output has grown sharply during this period. Like copra, the protein content of palm meal is relatively low.

Output of locally produced soybeans has remained fairly steady over the past decade. These beans are used mainly for food rather than for feed. A similar situation exists for peanuts. Domestic demand for roasted peanuts and peanut sauce—very popular in Indonesian cuisine, for example—is high enough to restrict their availability for crush.

King-Sized Role for Soybeans

U.S. soybeans rank at the top of the sales list in every country in the group, except for the Philippines. There, soybean meal was No. 1 with sales of \$60.1 million in fiscal 1984. That represented more than half of U.S. meal sales to all six countries.

With rising demand for protein meals, increasing food use of oilseeds and apparently long-term deficits in local supplies, U.S. exporters can expect continuing increases in imports of soybeans—and possibly peanuts.

Indonesia is planning to build a processing plant, which is not likely to be completed before 1986. Once operations begin, the expected drop in soybean meal imports should be offset by increased purchases of soybeans.

The Phil-Asia plant in the Philippines is already operational, but awaits a government decision allowing soybean imports. Should this be forthcoming, a large portion of the country's meal imports may be replaced by soybeans.

Trends for Other Vegetable Oils

The six Asian markets bought about 14 percent of the value of U.S. cottonseed oil exports in fiscal 1984, a decline of 30 percent from the preceding year. The drop stemmed mainly from short U.S. supplies and subsequent high prices compared with the previous year. Cottonseed oil is used primarily to pack food products.

Export sales of other U.S. vegetable oils—especially sunflowerseed and safflowerseed oils—expanded, probably in response to the rising demand in Japan for "health food" oils.

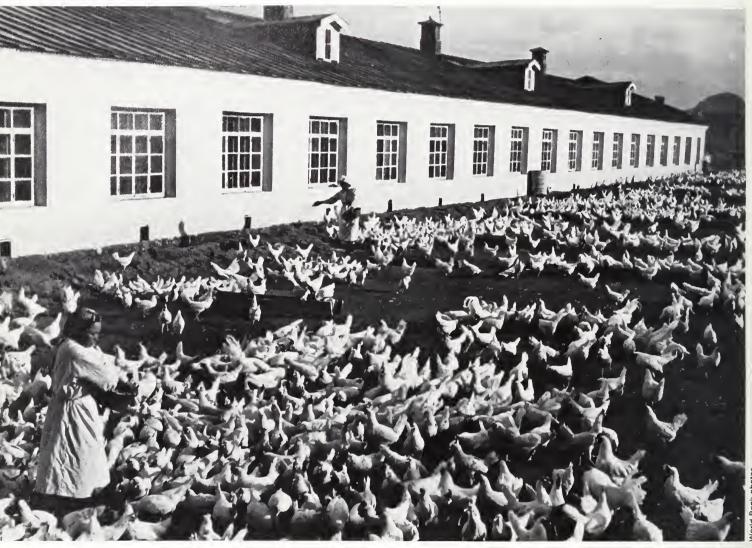
Greater use of identified oils in Japan represents a significant marketing step in that country because Japan traditionally has consumed blended, unidentified vegetable oils. However, consumer preference for Canadian sunflowerseed oil, because of its higher linoleic acid content, poses stiff competition for U.S. producers and exporters.

U.S. exports of peanuts and peanut oil to the region reached \$16.6 million in fiscal 1984, with most of the shipments going to Japan. A substantial unmet demand for edible peanuts exists in the region, particularly in the Indonesian market. This year, competitive exports from China are likely to reduce the growth of U.S. sales in the region.

The author is with the Oilseeds and Products Division, FAS. Tel. (202) 382-0092.



Investing in Developing Countries Can Pay Off



By Dale Good

Continuing debt servicing problems may lead an increasing number of developing countries to encourage more foreign, private direct investment in their economies.

For those businesses who do invest and their hosts, the benefits cover a wide range. Foreign investment creates jobs, attracts domestic investment, pays taxes, generates foreign exchange earnings and brings needed technology, know-how and management skills.

Additional benefits for U.S. private companies from international direct investment may include:

- —securing long-term sources of raw materials.
- -establishing marketing organizations.
- —facilitating exports from the home (or service) country.
- —manufacturing products in foreign countries for local or regional markets.
- —avoiding trade barriers of the host country.
- —lowering the cost of the final product through lower costs abroad for inputs, production or transportation.
- —improving the ability to serve foreign markets through products designed, manufactured, distributed and serviced from local facilities.

- —enjoying the advantages of favorable trade agreements that the host country may have with its neighbors.
- —accomplishing international diversification of holdings and production capacity.

Experts say that unmet food and foreign exchange needs of developing countries should be viewed as business opportunities. Countries, in an effort to increase foreign exchange earnings, are interested in developing export industries, which generate a demand for foreign technology and capital.

Entrepreneurs and venture capitalists with the foresight and knowledge to spot opportunities in these areas who can pull together the combination of capital, know-how and experience to meet them, could find large and profitable markets in which to operate.

Both Sides Must Play Active Roles

To attract investors, developing countries realize they need to provide assurances of fair and equitable treatment, reasonable and continuous access to supplies and freedom from unreasonable interference with company decision making. Also, they must offer a stable and predictable structure of laws and policies.

U.S. investors, on the other hand, must be willing to consider creative forms of investment that will meet self-needs and still satisfy the political and economic requirements of host countries.

Production sharing agreements, licensing and services contracts, franchising and other contractual types of investment can reduce or eliminate negative attitudes that sometimes surround ownership and control, while still providing the incentives and production sought by the investor.

Where To Get Help

Large multinational corporations generally can initiate investment ventures on their own, but this is not often the case for the smaller entrepreneur.

The following list includes a number of agencies in this country that are available to help U.S. firms investigate, evaluate and implement overseas investments:

U.S. Department of State, Trade and Development Program: a variety of services, including financing, on a matching basis, of pre-investment studies undertaken by U.S. firms considering foreign investment. Tel. (202) 235-3660.

Agency for International Development, Bureau for Private Enterprise: offers financial assistance to foreign-owned businesses. Tel. (202) 632-8298.



Overseas Private Investment
Corporation: provides qualified investors
with insurance against political risk; loan
guarantees; direct loans to small
businesses and cooperatives and a
variety of pre-investment services. Tel.
(800) 424-OPIC, (202) 653-2800.

U.S. Department of Agriculture, Office of International Cooperation and Development: works with U.S. private sector to promote overseas agricultural development through the use of public/private sector joint activities. Tel. (202) 475-4191.

U.S. Department of Commerce, International Economic Policy Group: offers business counseling for overseas investors. Tel. (202) 377-2527.

Export-Import Bank, Foreign Credit Insurance Association: insures U.S. exporters against commercial and political losses. Tel. (202) 566-8990.

Small Business Administration, Office of International Trade: offers training and counseling for small businesses that want to move into exporting. Tel. (202) 653-7794. ■



The author is with the Export Programs Division, FAS. Tel. (202) 447-3031.

International Trade Network Links Buyers and Sellers

By James Sayre

A new USDA service, the Buyer Alert Program, places information about U.S. food and agricultural products in the hands of foreign buyers from Tokyo, to London, to Bahrain and back.

Using a high-speed telecommunications system, this service forwards sales announcements of featured products from Washington, D.C. to interested overseas buyers.

For several years, the Foreign Agricultural Service has provided product publicity to help U.S. suppliers introduce food and agricultural products to foreign markets. The monthly newsletter, Contacts for U.S. Agricultural Products, had been the primary vehicle for this service.

Program Speeds Service; **Targets Value-Added Markets**

Now, the Buyer Alert Program goes one step beyond product introduction. Every Wednesday, actual announcements of products available for export are transferred electronically to interested importers in the leading value-added export markets for U.S. products.

Each announcement includes an indicator price for the featured product. This price information helps the foreign buyer to actively respond to sales opportunities.

This weekly service eliminates normal delivery delays between Washington, D.C. and foreign countries and is targeted to assist U.S. firms in the valueadded food and agricultural sectors.

By October 1985, the Buyer Alert Program will reach importers in the more than 20 countries that represent 80 to 90 percent of the major value-added U.S. agricultural export markets. There will be extensive coverage of Western Europe, East Asia, the Middle East, Canada and Mexico.

Pilot Program Successful in Japan

The service was introduced in Japan by the U.S. agricultural counselor in Tokyo in November 1984 and it has been well received by importers there as well as by participating U.S. exporters.

Interest in the program was boosted in December by a front-page article in Nihon Keizai, the leading Japanese economic daily newspaper. The article called the program "a fairly bold experiment for the U.S. government."

When the agricultural counselor in Tokyo conducted a three-day test of the Buver Alert service last fall, almost 100 Japanese firms requested Buyer Alert notices. To receive this service, a firm must file an application, which includes information on how to transmit Buver Alert announcements electronically to its offices.

U.S. firms provide announcement information, which includes the product type and variety, the quality, description, packaging and labeling details, shipping specifications such as minimum shipment and quantity per container, and quantity available for export. Also included are indicator prices (valid through a specific date), bank reference data and information on the firm itself.

Currently, U.S. firms may submit two announcements per week. For submission forms and additional information on how to participate in the Buyer Alert Program, contact Agricultural Information and Marketing Services, Foreign Agricultural Service, Room 4645-S, USDA, Washington, D.C. Tel. (202) 447-7103.

The author is with the Agricultural Information and Marketing Services Staff. FAS. Tel. (202) 447-7103.

United States Department of Agriculture

Foreign Agricultural Service

For U.S.

Products

Agricultural



products Offered by U.S. Exporters

BEVERAGE -- California white, red, Available in 1 liter decanter card Minimum shipment of 800 cases. Port San Francisco. Valid thoroy 8ank, San Francisco, California. Main Street, San Francisco, Cal UR. Phone: (415) 555-2345.

The following announcements and specifications are provided by U.S commercial firms. USDA does not endorse the products or guarantee the regulations and label clearance procedures of your government.

Products Offered by U.S. Exporters

APRICOTS-- Dried and sliced apricots, grade B or better, #5 size. Packaged in 25 lb. bulks. Indicator Price: \$1.50 per lb., F0B Port of Sales Company, P.O. Box 123, Sacramento, California. Contact: David Smith, Fruit Phone: (916) 121-1211.

Country Briefs

European Community

Wine Output Decline Helps Budget

Production declines for the European Community's (EC) three major wine producing countries in 1984 (Italy, France and Germany are No. 1, 2 and 3, respectively) have come at an opportune time for the EC budget. With EC wine stocks now amounting to slightly more than half of annual production, the EC has been spending about \$1.4 billion annually on support measures (intervention and distillation) for wine. Thus, it comes as a minor relief to the EC to have some decline in its "wine lake."

The wine surplus also has been a major impediment to the completion of negotiations for the access of Spain and Portugal to the EC, planned for Jan. 1, 1986. Spain in particular will add to the EC surplus. Spanish production in 1984 amounted to almost half of Italy's production, and Spain's wine surplus (the amount distilled) has more than doubled during the past decade. Since accession would generally increase EC budget expenditures for wine, the prospect has forced the issue of how to bring the surplus under control. The latter issue has the current wine-producing members at loggerheads because the various measures under consideration would affect each member differently. The smaller 1984 production might ease differences.

EC wine has also figured in the EC-U.S. trade conflict. EC wine prices presently are below 70 percent of the guide price (a target price set each year, based on average prices of the previous two years and current price trends). Low EC prices, combined with the strong dollar, have made EC wines very competitive in the United States. The smaller EC harvest in 1984 will cause prices to rise, and since quality wines are especially affected, it will result in higher prices for quality wines from stocks of earlier vintages. All in all, EC wine prices to U.S. importers are expected to increase during 1985, even if the dollar does not weaken. *Miles Lambert, Economic Research Service. Tel. (202) 447-8289.*

Poland

U.S. Feed Sales Limited

This year Poland will import about 1.2 million metric tons of protein meals and over 500,000 tons of corn. But future import demand could be limited by partial substitution of corn and soybean meal in feed rations by industrially produced enzyme preparations. Polish feed imports are now running to hundreds of millions of dollars. In 1983, for example, U.S. feed grain and soybean exports to Poland were valued at \$109 million.

Polish experiments with broiler feeds show that a formulation of domestic feed ingredients (Polish rye and pulses) with an enzyme preparation added would perform almost as well as a corn and soybean meal formulation.

Application of these experimental results depends very much upon the cost relationship of the enzyme and protein meal in production. However, with the policy pressure to achieve self-sufficiency, at least some use in the commercial feed industry is anticipated. Another constraint will be that faced in neighboring countries, namely the need to increase production of industrially produced vegetable protein substitutes. Therefore, in the next several years, import patterns for feed components are not likely to change drastically. *Frank A. Coolidge, Agricultural Attache, Warsaw.*

India

Exports Likely asWheat Stocks Swell

India is expected to export 1-2 million tons of wheat over the next year because recordshattering 1983/84 food grain harvests have boosted wheat stocks well above target. With excellent harvests also forecast for 1984/85, food grain stocks will likely rise further and exceed covered storage capacity by a wide margin by July 1985, unless surplus wheat is exported. Likely destinations for exported wheat include the Soviet Union and neighboring Bangladesh, Nepal and Sri Lanka.

The Soviet Union probably will be the major market, with wheat possibly bartered for Soviet petroleum under the Indo-Soviet rupee trade facility. The Soviet Union bought 1.5 million tons of Indian wheat during 1977-80, with most of that wheat shipped to Vietnam, North Korea and the Soviet Union.

With only relatively small amounts of rice trade likely, India's port facilities should be capable of handling 2 million tons of wheat over the next 8 to 10 months. *Rip Landes, Economic Research Service. Tel.* (202) 447-8229.

Sweden

More Soy, Less Fishmeal Wanted in Hog Feeds

A decision to cut down on the amount of fishmeal allowed in Swedish hog feeds is expected to result in an increase of 35,000 to 40,000 tons of soybean meal in those feeds and a corresponding reduction of 20,000 to 25,000 tons of fishmeal.

The lower fishmeal use recommended by the Swedish Agricultural Market Board was based on research showing that pork from animals fed excessive amounts of fishmeal has a reduced storage life and an undesirable taste. Large amounts of pork are in frozen storage part of the year in Sweden, due to the seasonal demand for certain cuts such as hams and the fluctuation in hog slaughter.

The Swedish meatpacking industry had requested the feed industry to reduce its use of fishmeal to no more than 0.2 percent of crude fish fat in feeds used for fattening hogs. The Association of Swedish Farmers made a similar request and proposed a temporary differential fee to avoid feed price increases. The Board will be giving temporary rebates, probably through mid-1985, to reduce the prices of oilseed meals that replace fishmeal. The rebates will be adjusted monthly to reflect changes in soybean and fishmeal prices. Shackford Pitcher, Agricultural Attache, Stockholm.

Yugoslavia

Poultry Production Expanding

The fastest growing sector of Yugoslavia's agricultural economy in the past 20 years has been poultry farming. Total poultry meat production rose fourfold, from 67,000 tons in 1963 to 287,000 tons in 1983. Preliminary data for 1984 indicate that production rose another 4.5 percent to 300,000 tons, of which broiler meat comprised 80 percent. Egg production also recorded a dramatic rise, increasing from 1.6 billion in 1963 to 4.6 billion in 1983.

Favorable prices paid to producers have been a prime factor in the expansion, especially for broiler meat. In order to compensate producers for rapidly increasing feed costs, large increases in producer prices—60 percent for broilers and 70 percent for eggs—were authorized in 1984. Poultry production has remained somewhat more profitable than other sectors of the Yugoslav livestock industry because of greater efficiency in production, and the strong demand for poultry products, especially in the domestic market.

The surge in the poultry sector has given a considerable boost to U.S. sales of soybeans and soybean meal to Yugoslavia. Sales averaged about 220,000 tons of soybeans and over 100,000 tons of soybean meal during the 1980s, not counting meal made from U.S. soybeans purchased in Europe.

The American Soybean Association has been working for several years with the Yugoslav feed industry, as well as with scientific research organizations, to improve production systems and the industrial character of the poultry industry. A 35-person Yugoslav feed manufacturing team visited the United States in 1984 to review the latest methods of feed compounding in the United States. *Harlan J. Dirks, Agricultural Counselor, Belgrade.*

Jordan

Growing Poultry Industry A Market for U.S. Feeds

While Jordanians have a distinct preference for red meats, shortages and rising prices for these favorites are encouraging greater consumption of poultry—to the possible benefit of U.S. feed grain producers.

Jordan depends and will continue to depend almost totally on corn imports to meet the ever-increasing demands of its poultry industry. (The country itself produces only about 1,000 tons of corn annually, most of which is consumed as a snack food.) Its imports totaled 170,000 tons in 1983, with the United States the largest supplier, providing about two-fifths of the total. However, the United States faces strong competition from Yugoslavia, Brazil, Kenya, Argentina, Turkey and Thailand. U.S. corn will have to remain price competitive to continue to do well in the Jordanian market. Clyde E. Gumbmann, Agricultural Attache, Damascus.

China

Mink Industry Poised for Takeoff

The appearance of high-quality Chinese furs at a fur and garment fair in New York last September is an indication of the attention China is giving to the development of its mink industry.

China currently produces 10 percent of the world's mink. Although the raising of mink on a commercial basis reportedly began hundreds of years ago, it was not until the 1950s that China earnestly began developing its mink industry with the introduction of Russian varieties. Chinese officials have expressed confidence that, in the near future, they will be able to boost mink quality sufficiently to compete in high-quality markets such as the United States.

Four developments support this confidence: improvements in breeding stock, improvements in diet, changes in the organization of production and processing advances.

China currently is importing breeding stock from the United States, Scandinavia and Japan in an effort to upgrade the genetic pool. It also has acquired greater expertise in mink feeding. For example, feed concentrates are being used in mink rations, thus eliminating some of the logistical and hygenic problems of transporting and handling fresh feed. Quality also has been improved by permitting private households to raise mink. Until the past two years, mink raising was confined to special farms.

For the U.S. mink industry, China's efforts to upgrade production through use of foreign expertise and products such as breeding stock will translate into at least a short term market opportunity. However, over the longer term, China may develop into a formidable competitor.

The Chinese are anxious to export and earn foreign exchange. Chinese officials have stated their intention to increase their share of the \$100 million U.S. fur and leather import market from their current 1 to 2 percent. Norman R. Kallemeyn, Agricultural Counselor, and Joel Haggard, Agricultural Trade Officer, Beijing.

SUBSCRIPTION ORDER FORM

Please print or type Write check payable to: Superintendent of Documents

MAIL ORDER FORM TO:

Superintendent of Documents **Government Printing Office** Washington, D.C. 20402

For Office	Use	Onl	١
------------	-----	-----	---

Quantity Charges
Publications
Subscriptions
Special Shipping Charges
International Handling
Special Charges
OPNR
UPNS
Balance Due
Discount
Refund

Enter My Subscription To FOREIGN AGRICULTURE

@ 16.00 domestic (United States and its possessions); \$20.00 foreign. The Government Printing Office requires that foreign addressees send international money orders, UNESCO coupons, or checks drawn on a domestic bank only.

Enclosed is \$	Credit Card Orders Only (Visa and Mastercard)				
☐ Check ☐ Money order ☐ Character to my Panasit Associate	Total charges \$				
Charge to my Deposit Account No	Credit card No.				
Order No	Expiration Date Month/Year				
Name—First, Last					
Company Name or Additional Address Line					
Street Address					
City	State Zip Code				
Country					

United States
Department of Agriculture
Washington, D.C. 20250

OFFICIAL BUSINESS

Penalty for Private Use, \$300



Third Class Bulk Rate Postage & Fees Paid USDA-FAS Permit No. G-262

